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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/691,365	10/22/2003	Alan Lampe Browne	GP-303275	4958
75	590 04/21/2004		EXAM	INER
KATHRYN A MARRA			TORRES, MELANIE	
General Motors Corporation Legal Staff, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300			3683	
Detroit, MI 48	8265-3000		DATE MAILED: 04/21/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Control of the Contro					
	Application No.	Applicant(s)			
Office Antique Commence	10/691,365	BROWNE ET AL.			
Office Action Summary	Examiner	Art Unit			
TI MAN INO DATE SHI	Melanie Torres	3683			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orresponaence adaress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
<ul> <li>1) ⊠ Responsive to communication(s) filed on 22 October 2003.</li> <li>2a) ☐ This action is FINAL.</li> <li>2b) ☑ This action is non-final.</li> <li>3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ul>					
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-14 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) 8-14 is/are allowed.</li> <li>6)  Claim(s) 1 and 5-7 is/are rejected.</li> <li>7)  Claim(s) 3 and 4 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on 22 October 2003 is/are:  Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction  The oath or declaration is objected to by the Ex	a) accepted or b) objected or b) objected or b) objected or abeyance. See on is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive i (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 10/22/03.</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

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#### **DETAILED ACTION**

### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show wherein "the cylindrically shaped fluid passageway has a diameter that decreases from the first chamber to the second chamber" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### Claim Objections

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims, 1, 5, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Munning et al.

Re claims 1 and 8, Munning et al. disclose a magnetorheological damper, the damper comprising: a cylindrically shaped housing (1), a magnetorheological fluid disposed in the cylindrically shaped housing; a piston assembly (104) disposed within the cylindrically shaped housing in sliding engagement with the cylindrically shaped housing defining a first chamber and a second chamber, wherein the piston assembly comprises a plurality of cylindrically shaped fluid passageways (131) extending from the first chamber to the second chamber, and at least one electromagnet (122); and a power supply in electrical communication with the at least one electromagnet.

Re claims 5 and 6, Munning et al. disclose wherein the cylindrically shaped fluid passageway (131) has a diameter that increases from the first chamber to the second chamber. (Figure 14)

Re claim 7, Munning et al. disclose a third chamber (7) defined by a second floating piston (8) and an end of the housing, wherein the third chamber is filled with an inert gas.

# Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Munning et al.

Re claim 2, Munning et al. do not teach wherein the plurality of cylindrically shaped fluid passageways defines a cross sectional area of the piston assembly of at least about 30 to about 70 percent. It would have been an obvious matter of design choice to modify Munning et al. by having a passageway cross sectional area between 30 and 70 percent since applicant has not disclose that having the specific range solves any stated problem or is for any particular purpose and it appears that the shock absorber would perform equally well with cross sectional areas of a variety of ranges.

### Allowable Subject Matter

- 7. Claims 8-14 are allowed.
- 8. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach a piston assembly comprising an open

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cell porous media comprising a plurality of fluid passageways extending from a first chamber to a second chamber.

#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Muhlenkamp, Carlson, Monahan, Sandrin et al., and Daniels teach magnetorheological dampers.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703)308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 19, 2004

Milani Sorres 4-19-04